

MULTIMEDIA



UNIVERSITY

STUDENT ID NO

--	--	--	--	--	--	--	--	--	--	--	--

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 3, 2017/2018

DMA5018 – MULTIMEDIA APPLICATIONS

(For Diploma students only)

5 JUNE 2018
2:30 p.m. – 4:30 p.m.
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of 8 pages.
2. Answer ALL questions in Section A and Section B on the Answer Booklet.

SECTION A: 30 MULTIPLE CHOICE QUESTIONS (30 MARKS)*Instruction: Write your answers in the Answer Booklet.*

1. Text that has words, sections, or thoughts are linked together with clickable spots is called _____.
 - A. hotspot
 - B. hypertext
 - C. hyperlink
 - D. hypermedia

2. Specifying which font to be substitution is called _____.
 - A. alising
 - B. anti-alising
 - C. rasterization
 - D. font mapping

3.

*Label X* shown in typography above is known as:

- A. leading
 - B. baseline
 - C. point size
 - D. cap height
-
4. _____ fonts are used for headlines and bold statements. It is considered better for computer displays.
 - A. Arial
 - B. Serif
 - C. Calibri
 - D. Sans-serif

 5. The wider-than-tall orientation that is normal to monitors is called _____.
 - A. landscape
 - B. portrait
 - C. canvas
 - D. screen

 6. Which of the following is FALSE about symbols?
 - A. Used to convey human emotions.
 - B. Used to convey meaningful messages.
 - C. Symbolic representations of objects and processes.
 - D. Concentrated text in the form of stand-alone graphic constructs.

Continued...

7. Bitmaps are an image format suited for creation of the following EXCEPT:
- Complex drawings.
 - Photo-realistic images.
 - Images that require fine detail.
 - Graphic artists designing for the print media.
8. Which of the following statement are TRUE about bitmap images?
- Use less memory space.
 - Not easily scalable and resizable.
 - Require a plug-in for web-based display.
 - Download faster compare to vector images.
 - Can be converted to vector images using autotracing.
- II, V
 - III, IV
 - I, III, IV
 - All of the above
9. Which of the following is the BEST example of lossy formats for image file compression?
- GIF
 - PSD
 - PNG
 - JPEG
10. Authoring tool features as stated below refers to _____.
- *Layering capability.*
 - *Image manipulating.*
 - *Scalable dimensions and text.*
 - *Edit and retouching bitmapped image.*
- painting tools
 - drawing tools
 - word processing tools
 - 3-Dimensional modeling tools

Continued...

11. Vector-drawn images is suitable to be applied in which area?

- I. Computer-aided design
 - II. 3-D animation programs
 - III. Graphic artists designing for the print media
 - IV. Applications requiring drawing of graphic shapes
- A. I, II
 - B. III, IV
 - C. I, II, IV
 - D. All of the above

12. The 3-D application feature as stated below refers to _____.

A profile of the shape is rotated around a defined axis.

- A. lathing
- B. shaping
- C. modeling
- D. extrusion

13. Animation that moves objects in flat space but adds an illusion of depth through shadowing and forced perspective is animation in _____ space.

- A. 2D
- B. 2 ½ D
- C. 3D
- D. 4D

14. Which of the following is FALSE about animation?

- A. Defined as the act of making something come alive.
- B. An object moving across or into or out of the screen.
- C. It is concerned with the visual or aesthetic aspect of the project.
- D. A technique in which a series of progressively different graphics is used on each frame of movie film.

15. What is the extension of an Adobe Flash project that has been compiled for playback?

- A. .fla
- B. .svg
- C. .dcr
- D. .swf

Continued...

16. Some animation programs allow the animator to create a trail between two points and then animate an object along that trail. This type of animation is called _____.
- A. morphing
 - B. kinematics
 - C. cel animation
 - D. path animation
17. When sound is digitized, the frequency with which a section of sound is taken and stored is known as the _____.
- A. bit depth
 - B. resolution
 - C. sample size
 - D. sampling rate
18. Digital audio is known as _____ when the audio quality based on quality of your recording, and not the device the end user will play the audio.
- A. speaker
 - B. quantization
 - C. device dependent
 - D. device independent
19. Which of these statements regarding the MIDI audio format is TRUE?
- A. It is difficult to change instruments.
 - B. Spoken audio is difficult to include.
 - C. Sound tracks can be edited using waveform editors.
 - D. Files are generally larger than the same digital audio sound.
20. Which of the following sound editing operation BEST describes the statement below?

Edit and combine multiple tracks such as sound effects, voice-overs, music, etc; and merge the tracks and export in final mix to a single audio file.

- A. Multiple track
- B. Format conversion
- C. Splicing & Assembly
- D. Digital signal processing

Continued...

21. Which of the following multimedia elements places the highest demand on hardware performance?
- A. Audio
 - B. Video
 - C. Graphic
 - D. Animation
22. Computer displays draw the lines of an entire frame in a single pass; this technique is called _____.
- A. packing
 - B. overscan
 - C. streaming
 - D. progressive-scan
23. A video signal transmitted with all the signals mixed together and carried on a single cable is called _____.
- A. RGB video
 - B. composite video
 - C. component video
 - D. multiformat video
24. The video technique that allows you to choose a color or range of colors that become transparent, allowing the video image to be visible behind those colors in the overlying image, is known by all of the following **EXCEPT**:
- A. interlacing
 - B. blue screen
 - C. green screen
 - D. chroma key editing
25. There are three analog broadcast video standards are commonly in use around the world **EXCEPT**:
- A. Phase Alternate Line
 - B. High Definition Television
 - C. Sequential Color and Memory
 - D. National Television Standards Committee
26. The _____ and the _____ are the protocols for communication on the Internet.
- A. Hypertext Transfer Protocol; Internet Protocol
 - B. Transmission Control Protocol; Internet Protocol
 - C. Uniform Resource Locators; Hypertext Transfer Protocol
 - D. Hypertext Transfer Protocol; Transmission Control Protocol

Continued...

27. An IP address can be exchanged with a(n) _____.

- A. MIME-type
- B. usenet group
- C. domain name
- D. point-to-point protocol

28. The amount of data expressed in terms of bits per second is referred to as _____.

- A. bps
- B. speed
- C. packets
- D. bandwidth

29. Web pages are written in _____.

- A. MIME
- B. HTML
- C. TCP/IP
- D. JAVA

30. Which of the following services is provided by Internet?

- I. FTP
 - II. Gopher
 - III. Usenet
 - IV. Telnet
 - V. SMTP
 - VI. MUD
-
- A. I, II, IV, V
 - B. I, II, III, IV
 - C. III, IV, V, VI
 - D. All of the above

Continued...

SECTION B: 5 STRUCTURED QUESTIONS (70 MARKS)*Instruction: Write your answers in the Answer Booklet.***QUESTION 1 (15 MARKS)**

- a) Explain THREE (3) types of character set and give an example for each of them. [9 marks]
- b) Explain the use of image editing programs in producing a multimedia project. [4 marks]
- c) List TWO (2) 3-D animation drawing and rendering tools. [2 marks]

QUESTION 2 (15 MARKS)

- a) Explain cel animation technique. [8 marks]
- b) Discuss the following terminology in animation:
- i) Kinematics [2 Marks]
 - ii) Inverse kinematics [2 Marks]
- c) Discuss and identify the difference between computer animation and the traditional way creating an animation. [3 marks]

QUESTION 3 (10 MARKS)

- a) Discuss digital audio. [5 marks]
- b) Calculate the audio file size in *Megabytes* of 2.5 minutes, 2 bytes, 44.1kHz mono music. [5 marks]

QUESTION 4 (15 MARKS)

- a) Explain codec. [3 marks]
- b) Calculate the video file size in gigabytes. [12 marks]

Duration	Frame Rate	Frame Size	Color Depth
78 minutes	30 fps	800 x 400	16

Continued...

QUESTION 5 (15 MARKS)

- a) Explain bottleneck. [1 mark]
- b) Discuss **FOUR (4)** ways to avoid bandwidth bottleneck. [8 marks]
- c) Explain how data are sent over the internet. [6 marks]

End of Page.